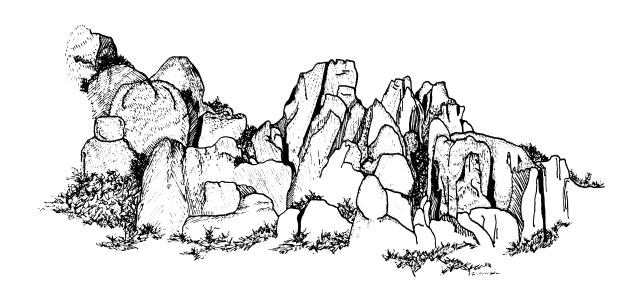
Educator's Preparation Guide

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Educational Programs

Our programs offer educators the opportunity to use the park as an outdoor learning environment. By immersing their students in the park's resources, educators bring concepts to life! The programs available at Pinnacles have been designed to meet a variety of educational objectives by offering two options to utilize the park as a classroom. These options include:

- Participation in a park educator led, one-day visit on various topics
- A teacher led, one-day visit to apply concepts applicable to the park's resources

One Day Park Educator Led Program

This unique program has been created to facilitate the use of the park as an outdoor classroom tied to the California State Standards for various grades. Our program allows for students to gain valuable background information in order to make informed decisions concerning our environment. The typical topics requested include:

Geology, Wildflowers, Botany/Vegetation, Caves/Bats, Condors and Cultural History

One Day Teacher Led Program

The teachers are responsible for leading the hikes and presenting their own lessons. Teachers that would like to receive a fee waiver for the park entrance fee must submit all of the required documents to the fee coordinator in advance of the school visit. See park website park website www.nps.gov/pinn for more information about the required documents for a fee waiver.



Born of Fire Formed by Time: The Geology of Pinnacles National Park

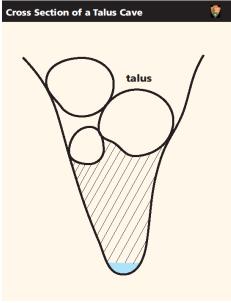
Rising out of the chaparral-covered Gabilan Mountains, east of central California's Salinas Valley, are the spectacular remains of an ancient volcanic field. Massive monoliths, spires, sheer-walled canyons and talus passages define millions of years of erosion, faulting and tectonic plate movement.

Pinnacles National Park gets its name from the rock spires and crags that are seen throughout the park. The Pinnacles volcanic field eroded over millions of years as it moved northward along the San Andreas Fault. Rock debris in the form of boulders has weathered and settled, leaving behind spires of volcanic rock and talus caves.

The talus caves were formed when steep, narrow canyons filled with a jumbled mass of boulders from the cliffs above. The canyons are the result of faults and fractures in the central area of volcanic rock.

Pinnacles National Park has two main areas of caves; the Bear Gulch Caves are near headquarters in the East District, and the Balconies Caves are near Chaparral Picnic Area in the West District. Please use the Bear Gulch Pi Chart below to help plan your field trip. If planning to hike through Bear Gulch or Balconies Caves (closed seasonally), flashlights are a necessity. Call ahead for cave status: 831-389-4485 (Pinnacles Visitor Center)





Planning a Visit

To ensure that each visit to Pinnacles is a valuable educational experience, please read the following requirements and recommendations.

Educational Program Request and Application for Park Entrance Waiver of Fees

Please print and send back to the park the *application for waiver of park entrance fee* found on the park's web page, please fill it out completely, and return it *with all of the required documents* to the park via mail to *Pinnacles National Park, 5000 Hwy 146, Paicines CA 95043* and/or fax them to 831-389-4489. Park website: www.nps.gov/pinn. Click on *For Teachers*. Please call 831-389-4486 x 262 with any questions.

60 Day Notification

It is a requirement that the Resource Education Department receive these papers at least **60 days** in advance of the requested program date. The 60 day notification will allow our staff adequate preparation time and provide an opportunity to alleviate potential scheduling conflicts. **Programs that are not requested 60 days in advance are at risk of not being accommodated due to possible conflicts and may not be eligible for a park entrance fee waiver.**

ZERO Waste lunch

Students and parents SHOULD try to bring a lunch that is environmental friendly as possible. Example: cloth napkin, reusable water bottle, Tupperware container for food, etc. The idea behind the zero waste lunch is to raise awareness regarding the amount of garbage that lunches generate in one small part of their day and reinforce the idea that students can make personal choices about their actions.

Transportation / Parking

Teachers will need to arrange transportation to and from the park by either buses or car pools. If carpooling, all vehicles should arrive at the same location and time and check in at the Pinnacles Visitor Center / Campground Store to receive their parking passes.

Pilot Car

If you are traveling to Pinnacles in a school bus and are planning to enter the park via the **west entrance**, you **MUST** have a pilot car leading the bus(es) for safety reasons. A pilot car will be provided for groups that are participating in the park's resource education programs; if you are leading the group on your own, you will be responsible for providing a pilot car and driver between Metz Rd. and the Chaparral area.

Driving Directions

Pinnacles National Park has two entrances: east and west. The **west entrance** can be reached via Highway 101 near the town of Soledad. Exit HWY 146 onto Front St. making a left at the traffic light, then making a right onto East St. then right onto Metz Rd. then another left (east) along Highway 146 to the Chaparral Ranger Station. If the school travels to the park by bus, a pilot car *must* be provided

by the school due to the narrow road. At this time, however, if the school is participating in one of our park programs, the park will provide the pilot car. The southwest corner of the Chaparral paved parking area (furthest away from the restroom facility) is the best choice for parking and allows the bus to pull away with ease. Upon arrival, the lead teacher will check-in at the Chaparral Ranger Station and pick up the parking permit(s) for each vehicle.

The **east entrance** is reached via Highway 25, south of the city of Hollister and north of the town of King City, then west on Highway 146. **The entrances are NOT connected by road.** *It is not possible to drive through the Park.* Upon arrival the teacher checks into the <u>new</u> Visitor Center which is in the campground (the first building you will see on Hwy 146.) The person on duty will instruct you as to where the bus can unload and park.

If there are any delays due to poor weather conditions or traffic incidents please try to call the **Pinnacles Visitor Center at (831)-389-4485** so that a message can be passed on to the park educator via phone or radio.

Student Medications

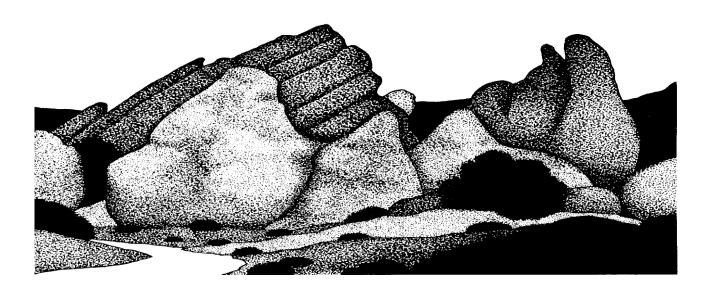
Our staff asks that you communicate to your parents the need for students to bring over the counter medication rather than prescribed. Just before departure or on the bus, you will need to collect all medications from students in zip lock bags, labeled with the name of the student, school name and when medication should be taken. Please make sure that the teacher has written permission to administer any medications to students by the parents.

Weather

Although uncommon, temperatures can exceed 100 degrees in the fall and spring. Please dress accordingly or contact Pinnacles for a current weather update.

Camping Information

The Pinnacles Campground is located on the eastern entrance of the park on HWY 146 next to the Visitor Center. To call the Visitor Center or campground dial 831-389-4485. Reservations are recommended for weekends and holidays, especially for large school groups. To reserve a campsite go to www.recreation.gov at least four to six months in advance for reserving a spring camping date.



On Your Way to Visiting Pinnacles

Once the Resource Education Department has received the *Educational Program Request and Application for Park Entrance Waiver of Fees*, the school will be scheduled into the park's education calendar and a letter acknowledging the date, time, program, and park entrance will be sent to the teacher. Educators should present this letter to the ranger in the Pinnacles Visitor Center on the east entrance or the Visitor Contact Station on the west entrance to obtain parking permits for each vehicle affiliated with the school.

Frequently Asked Questions

How long does a typical educational program last?

The resource education staff members are flexible when meeting the needs of the school groups visiting the park for a program. We understand that groups need to leave the park at specific times in order to maintain the school's bus schedule. If arriving by bus, school groups typically arrive at approximately 9:00 - 10:00 and depart at 1:00 - 1:30. If arriving via personal vehicles, school groups typically arrive at approximately 9:00 - 10:00 and depart about 2:00 - 2:30. The times are variable depending on the distance traveled by the school to visit Pinnacles National Park.

What is the best time of year to visit Pinnacles?

Pinnacles is a beautiful place to visit any time of year, and the best time to visit greatly depends on what the teacher wants to bring to life for the students. For example, if students are learning about wildflowers of California, teachers should schedule a trip in March – May, during the season when wildflowers are in bloom. If students are learning about how nature prepares wildlife for hibernation, teachers should schedule a trip in fall. The most popular time of the year is March and April when average high temperatures range from mid-60s to mid-80s. The least popular time of year is December through February when the average high temperatures range from low 50s – mid 60s and the chance of rain is high.

What trails will the students be hiking while at Pinnacles?

The park educator will discuss this with the teacher prior to the visit. At this time the teacher may indicate preference for one of the trails. On the east side, park educators usually lead groups along the Mosses Spring Trail through the Bear Gulch caves (when open) to the reservoir and returns via the Rim Trail—a distance of 2.5 miles with a elevation gain of about 500 feet. On the west side the park the educator may lead the group through the Balconies Caves and return via the Balconies Cliffs Trail, a distance of 2.4 miles with an elevation gain of about 700 feet. Both hikes are considered easy to moderate.

How large can our school group be?

Group Size: Some of the trails at Pinnacles are narrow, which makes it difficult to address large groups of students while discussing educational concepts. For this reason **no more than 35**

individuals are allowed in a group on a trail. Larger groups will need to be divided to avoid resource damage. The adult/student ratio should be a 1 adult to 10 students

Will my school group be able to enter and go through the caves?

Following the discovery of a maternity colony of Townsend Big-eared bats in 1997, the Bear Gulch Cave has been seasonally closed to the public to avoid disturbing bats which may be hibernating or raising their pups. The entire cave is open for a brief period in March and October, and most of the cave is open from July 15th to May 15th. The entire cave is closed from May 15th to July 15th. This general rule may vary according to conditions. For current cave openings call 831-389-4485. The Balconies cave is open year round for visitor exploration, but may be closed periodically because of flooding.

How do I familiarize myself with the trails my students will be hiking during their educational field trip at Pinnacles?

The best way to become familiar with the trails at Pinnacles is to visit the park and hike the trails that the students will be hiking. However, if this is not an option, you can view the park map on our website www.nps.gov/pinn and click on *Plan Your Visit* and then *Pinnacles Maps*. You can also talk with a park educator at 831-389-4486 x 262.

Can any park resources be taken out of the park for educational purposes or for souvenirs?

One of the rules that the park educator will go over with the students is to take away only memories – students, teachers, and chaperones are permitted to take pictures, but not permitted to take park resources for any reason.

Where will the bus(es) meet the pilot car if entering the park via the west entrance?

The bus will meet up with the pilot car on the western side of the park at the intersection of Hwy 146 and Metz Road before driving nine miles to the park entrance. See section on driving to Pinnacles.

What do I do if our school is late or we enter the wrong side of the park?

If teachers feel that they are going to be exceedingly late or have traveled to the wrong side of the park, then please call the Pinnacles Visitor Center at 831-389-4485. The ranger on duty will communicate the message to the appropriate person.

What if the weather is bad and I think we should cancel our educational field trip to Pinnacles?

If the weather does not look promising, please call the Pinnacles Visitor Center at 831-389-4485 and ask to speak with the park educator leading the group. They will be able to communicate the current weather conditions at Pinnacles and reschedule the trip if necessary.

What should a school due in an EMERGENCY?

In case of an emergency, the closest public telephone is outside the Pinnacles Visitor Center / Campground Store on the East side. There is no Cell Phone reception in the park.



For any emergency please call on the pay phone 911 to have a Ranger dispatched for any emergency.

Safety Tips:

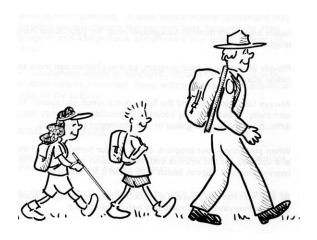
- Designate a meeting place that every student, teacher, and chaperone needs to report to after an emergency occurred (usually the Visitor Center or Ranger Station).
- Designate an adult who will be able to quickly report back to the Visitor Center to inform Pinnacles Staff of an emergency
- Bring plenty of water and a First Aid Kit

Will Cell phones work at Pinnacles?

Cell Phones **DO NOT WORK** on either side of the park. On the east side of the park a public pay phone is located in front of the Pinnacles Visitor Center /Campground Store. It will call out but can't accept any incoming calls. Park educators guiding hikes are in contact with park headquarters via radios in case there are any emergency.

Where can we refill out water bottles? How water should we bring?

Drinking water & restrooms are available at the Pinnacles Visitor Center / Campground Store, Bear Gulch Day Use Area, Chaparral parking lot and West Visitor Contact Station. On really hot days the park asks that visitors bring one liter of water per hour. Please make sure that you know which trail you will be hiking on to plan in advance your water needs.



Things to Think About

Field Trip Etiquette

Please go over these issues with your students before participating in a field trip at Pinnacles. Explain to the students the importance of observing these points and the consequences if they are not taken seriously. Please take note that Pinnacles National Park is a wilderness area and all resources are protected.

- Take away only memories Students are permitted to take pictures, but not permitted to take any resources home
- Leave only footprints Pack out what you have packed in
- Stay on the trails Stepping off designated trails causes resource damage
- Put resources back as you found them After examining natural items, return it to the place it was found
- Listen to the Park Educator leading the group Safety is our first concern while on trails



- Walk and talk quietly The more students use their senses, the more they will see and hear
- Stay with the group you are assigned during the field trip
- Flash photography inside the cave, the lighting can have a negative effect on the wildlife.
- While in the caves **DO NOT** shine the flashlight directly on the bats.

What to Bring?

Students/Chaperones:

- ✓ Layered clothing, a lightweight jacket
- ✓ Sunscreen, sunglasses, &/or a hat
- ✓ Sneakers/comfortable hiking shoes
- ✓ Zero waste lunch (environmental friendly as possible)
- ✓ Plenty of water
- ✓ Driving Directions (chaperons only)

Optional:

- ✓ Small backpack
- ✓ Binoculars, Camera, watch
- ✓ Flashlights (if the group will be going through the caves)

Teachers:

- ✓ Layered clothing, a lightweight jacket
- ✓ Sunscreen, sunglasses, &/or a hat
- ✓ Sneakers/comfortable hiking shoes
- ✓ Zero waste lunch (environmental friendly as possible)
- ✓ Plenty of water
- ✓ Binoculars, Camera, watch
- ✓ Cell phones DON'T WORK in the park
- ✓ Directions to the park and map of the park
- ✓ Medical emergency forms, First Aid Kit
- ✓ Flashlight (if the group will be going through the caves)
- ✓ Confirmation letter for the parking permits
- ✓ Lead car for the Western Entrance of the park if traveling by bus
- ✓ List of each group (with students and chaperone names listed)

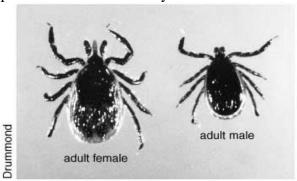


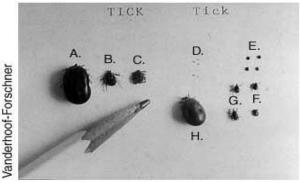


Possible Hazards While Hiking

LYME DISEASE

Lyme Disease is a bacterial infection that is transmitted by the bite of an infected tick. The two species of tick that transmit Lyme Disease in North America are the Western black-legged and the Black-legged ("deer") tick. Ticks hide in vegetation and use carbon dioxide, scent, and body heat to look for a host. Generally, a tick that carries the infective bacteria for Lyme Disease must be attached to a person for at least one day or more before the tick will transmit the infection.





Ways to Avoid Tick Bites:

- Stay on the trail to avoid ticks that may be in vegetation
- Use an insect repellent that contains DEET
- Dress properly, long shirt or pants, socks, sneakers, and a hat
- Check for ticks!! Look over the body, run fingers over skin and through clothes

References:

Lyme Disease Foundation/ www.lyme.org

POISON OAK - What To Look For:



- Small, shiny leaves that resemble those on an oak tree
- Usually has three leaflets, but can have up to seven leaflets in a group
- Grows as a vine or as a shrub
- Can be green or dark red in color
- "Leaves of Three, Let it Be"
- All parts contain allergen *urushiol*
- Consult a doctor if a rash occurs

HEAT-RELATED PROBLEMS

Are common from late Spring to early Fall when temperatures can exceed 100 degrees. Hike in the morning and evening during hot weather. Rest often, especially in the shade. Don't exceed your

limit. Rapid pulse and weakness are symptoms. Drink lots of water and take some salt, too. If overcome, lay down in the shade and pour water on yourself.

Wrapping It Up!

Evaluation: We would be delighted to receive feedback from the teacher as well as the students. Forms of student feedback may include: photos of their in-park visit, letters expressing their thoughts on the experience at Pinnacles, posters or other projects displaying what they have learned while involved with park programs.



Posters created by students hung at Nob Hill in Hollister, CA 12/04

Take Action! Service learning projects provide students the opportunity to use what they've learned to help make a difference in their community. We want to collaborate with teachers to develop service learning project/s for their students participating in a field trip to Pinnacles. Creating a service learning opportunity for students could be used as extra credit or become a class unification project.

Help students put into action what they have learned through any of the following ideas:

Volunteer at Pinnacles!

- Students, parents, teachers sign up for a separate Saturday visit to help eradicate invasive plant species in specific habitats
- Sign up to participate in a trash pick-up along the trails
- Share what you have learned with other park visitors



Teach the Public!

- Create posters that have an environmental message that can be placed in the school or local city library
- Trash Pick-Up Day at Pinnacles 11/13/04
- Write a newspaper article for the local paper about the importance of visiting National Parks
- Create a fun activity at school to teach other teachers about Pinnacles so that they can teach their students about the park.

Pinnacles Day Field Trip Evaluation
After your field trip to Pinnacles, please let us know how your experience was...

Educator/Parent/Student
School Associated
Date of park field trip
Mail to Pinnacles National Park, 5000 HWY 146, Paicines CA 95043, Attention Nichole Andler
Please respond by circling the number which best describes your opinion (5= Excellent through 1= Poor) Excellent Poor
Selection in the field trip date for the park visit
5 4 3 2 1
Organization of the park program
5 4 3 2 1
Background information provided prior to the field trip
5 4 3 2 1
Please share your thoughts regarding your recent park field trip experience: Circle your opinion
Was the program enjoyable? Absolutely Yes Somewhat Hardly No
Were the topics suitable for the age of the group? Absolutely Yes Somewhat Hardly No
Were the instructors professional? Absolutely Yes Somewhat Hardly No
Was the program relevant to the students interests? Absolutely Yes Somewhat Hardly No
Did the students learn the content? Absolutely Yes Somewhat Hardly No
Would you recommend the field trip? Absolutely Yes Somewhat Hardly No
Overall Program Rating: Superb Great Good Ok Poor
What, if anything, would you change about the program? Other, Please feel free to comment: